

PRACTICAL 4

AIM : Create an application in which user pass the data with intent object to another activity.

CODE:

```
package com.example.myapplication

import android.content.Intent
import android.os.Bundle
import android.view.View
import android.widget.Button
import android.widget.EditText
import android.widget.TextView
import androidx.appcompat.app.AppCompatActivity
import androidx.constraintlayout.widget.ConstraintLayout
import androidx.constraintlayout.widget.ConstraintSet
import android.view.ViewGroup.LayoutParams

class MainActivity : AppCompatActivity() {

    override fun onCreate(savedInstanceState: Bundle?) {
        super.onCreate(savedInstanceState)

        // Create the layout programmatically
        val layout = ConstraintLayout(this)
        layout.layoutParams = ConstraintLayout.LayoutParams(
            LayoutParams.MATCH_PARENT,
            LayoutParams.MATCH_PARENT
        )

        // EditText for user input
        val inputField = EditText(this)
        inputField.id = View.generateViewId()
        inputField.hint = "Enter something"
        layout.addView(inputField)

        // Button to send data
        val sendButton = Button(this)
        sendButton.id = View.generateViewId()
        sendButton.text = "Send"
        layout.addView(sendButton)

        // TextView to display received data (in case we handle
        receiving in the same activity)
        val displayTextView = TextView(this)
        displayTextView.id = View.generateViewId()
        displayTextView.text = "Received data will appear here"
        layout.addView(displayTextView)

        // Define constraints for the layout elements
        val set = ConstraintSet()
        set.clone(layout)
        set.connect(inputField.id, ConstraintSet.TOP, layout.id,
            ConstraintSet.TOP, 100)
        set.connect(inputField.id, ConstraintSet.LEFT, layout.id,
            ConstraintSet.LEFT, 16)
        set.connect(inputField.id, ConstraintSet.RIGHT, layout.id,
            ConstraintSet.RIGHT, 16)
```

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        set.connect(sendButton.id, ConstraintSet.TOP, inputField.id,
ConstraintSet.BOTTOM, 16)
        set.connect(sendButton.id, ConstraintSet.LEFT, layout.id,
ConstraintSet.LEFT, 16)
        set.connect(sendButton.id, ConstraintSet.RIGHT, layout.id,
ConstraintSet.RIGHT, 16)

        set.connect(displayTextView.id, ConstraintSet.TOP,
sendButton.id, ConstraintSet.BOTTOM, 32)
        set.connect(displayTextView.id, ConstraintSet.LEFT,
layout.id, ConstraintSet.LEFT, 16)
        set.connect(displayTextView.id, ConstraintSet.RIGHT,
layout.id, ConstraintSet.RIGHT, 16)

        set.applyTo(layout)

        // Set the layout as the content view
        setContentView(layout)

        // Send data to the second activity
        sendButton.setOnClickListener {
            val userInput = inputField.text.toString()

            // Create an Intent to start the second activity
            val intent = Intent(this, SecondActivity::class.java)
            // Add the data to the intent
            intent.putExtra("user_input", userInput)

            // Start the second activity
            startActivity(intent)
        }
    }
}

// SecondActivity that receives the data
class SecondActivity : AppCompatActivity() {

    override fun onCreate(savedInstanceState: Bundle?) {
        super.onCreate(savedInstanceState)

        // Create the layout programmatically
        val layout = ConstraintLayout(this)
        layout.layoutParams = ConstraintLayout.LayoutParams(
            LayoutParams.MATCH_PARENT,
            LayoutParams.MATCH_PARENT
        )

        // TextView to display received data
        val displayTextView = TextView(this)
        displayTextView.id = View.generateViewId()
        layout.addView(displayTextView)

        // Define constraints for the TextView
        val set = ConstraintSet()
        set.clone(layout)
        set.connect(displayTextView.id, ConstraintSet.TOP, layout.id,
ConstraintSet.TOP, 100)
        set.connect(displayTextView.id, ConstraintSet.LEFT,
layout.id, ConstraintSet.LEFT, 16)
        set.connect(displayTextView.id, ConstraintSet.RIGHT,

```

```
layout.id, ConstraintSet.RIGHT, 16)
    set.applyTo(layout)

    // Set the layout as the content view
    setContentView(layout)

    // Get the data passed from MainActivity
    val receivedData = intent.getStringExtra("user_input")

    // Display the data in the TextView
    displayTextView.text = receivedData
}
}
```

OUTPUT:

